

Application No.: 10/824,165
Amendment Dated March 17, 2008
Docket No.: ERN-TSH-001

Amendments to the Specification

Replace paragraph [1017] with the following paragraph:

[1017] Truss 100 is a conventional roof truss formed, e.g., from light gauge (22 to 12 ga) steel stud members, but it is formed using techniques of the present invention and takes advantage of features available on conventional roll-forming machines. Namely, the machine is used not only to form and cut each truss member into its proper dimensions, but also, it applies an alignment guide at each part of a member that is connected to another member. An alignment guide, as used herein, can be anything such as a mark, feature, detent, recess, protrusion, hole, or the like that is used for aligning two or more members together at a particular desired location where they are to be connected to each other. The use of alignment guides makes it easier and more efficient to assemble stud members into a truss because it eliminates the need to use a [[jib]] jig for aligning and possibly securing the members as they are being fastened to each other. Instead, with the assistance of one or more persons, the alignment guides serve to accurately position the members relative to each other and with some alignment guides, secure them in place as they are being connected together, e.g., by a person with a self-driving screw gun. In one embodiment, the alignment guides are placed on the members at their connection nodes by a roll-forming machine used to form the members.

Replace paragraph [1027] with the following paragraph:

[1027] In one embodiment, the interface module 410 uses data from one [[ore]] or more of these generated files to generate a control file for forming the constituent members and applying to them alignment guides for assembly of the trusses. It uses data from the truss design program 407 and outputs control files that are suitable for execution by the roll-form machine controller 420. The interface module comprises one or more software modules, patches, functions, routines, and/or programs running on computer 405, controller 420, a separate computer or processor, or a combination thereof. In the depicted embodiment, interface module 410, when executing, performs routine 412. Routine 412 includes the steps of receiving truss parameters from the design program at step 414, determining alignment guide locations for truss members at step 416, and generating control data for controlling the roll forming machine to form

Application No.: 10/824,165
Amendment Dated March 17, 2008
Docket No.: ERN-TSH-001

the truss members at step 418. there are many suitable ways to perform the functions of routine 412. For example, they could be performed by a separate program running on computer 405 or on a separate processing machine. They could also be performed by a patch, plug-in or module designed to execute in cooperation with the truss design program 407.

Replace paragraph [1028] with the following paragraph:

[1028] Similarly, there are numerous suitable ways to perform the functional steps. In one embodiment, alignment guides are placed at nodes defined by member centerline intersections. From truss geometry data (which it can obtain from the truss design program or from another program if no truss design program is used), interface module 410 determines node locations for each truss member based on centerline intersections. It then generates (or modifies) a control file for execution by roll-form machine controller 420. In one embodiment, a patch, executing with the truss design program 407 to transform truss member cut list data (e.g., from a KeyMark™ ".rol" format) into a suitable machine controller format is enhanced (or augmented with another patch) to include this node location data to cause the machine to also punch an alignment guide hole in the nodes on the truss members. In another embodiment, further functionality is included that alters node locations when it is determined that the node is too close to the edge of a member. Interface module 410 may also generate controller file data for causing [[a]] an assembly tag such as the one discussed above to be applied to each member.